STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

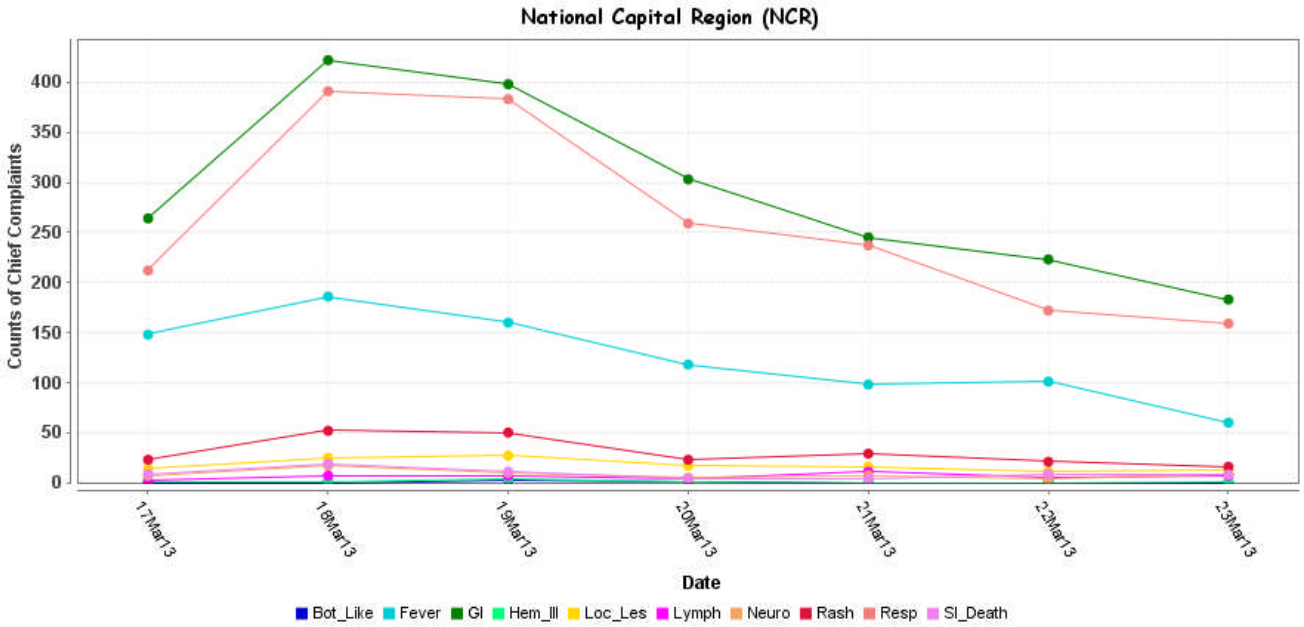
March 29, 2013

Public Health & Emergency Preparedness Bulletin: # 2013:12
Reporting for the week ending 03/23/13 (MMWR Week #12)

CURRENT HOMELAND SECURITY THREAT LEVELS

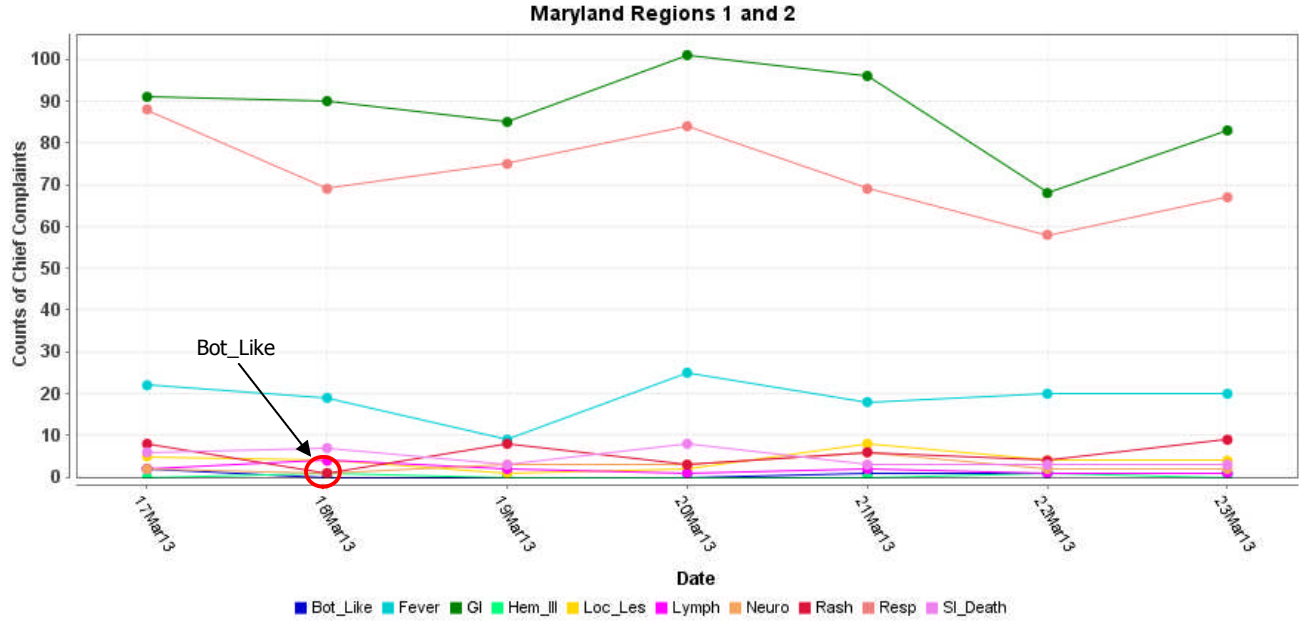
National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

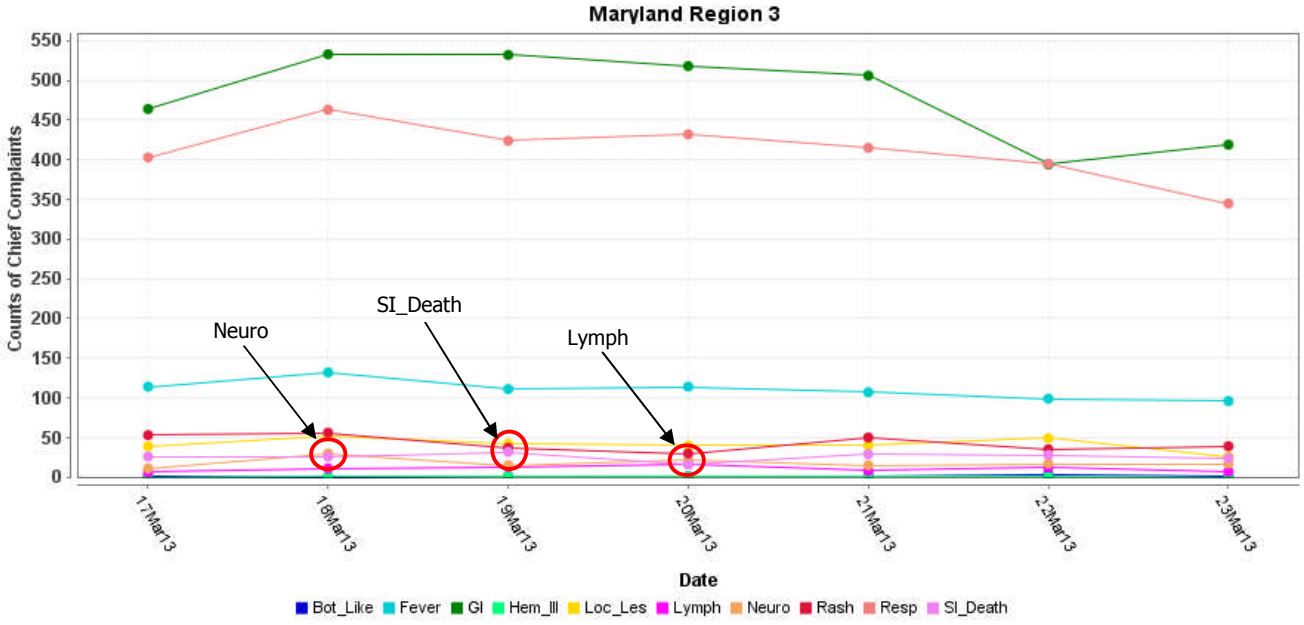


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

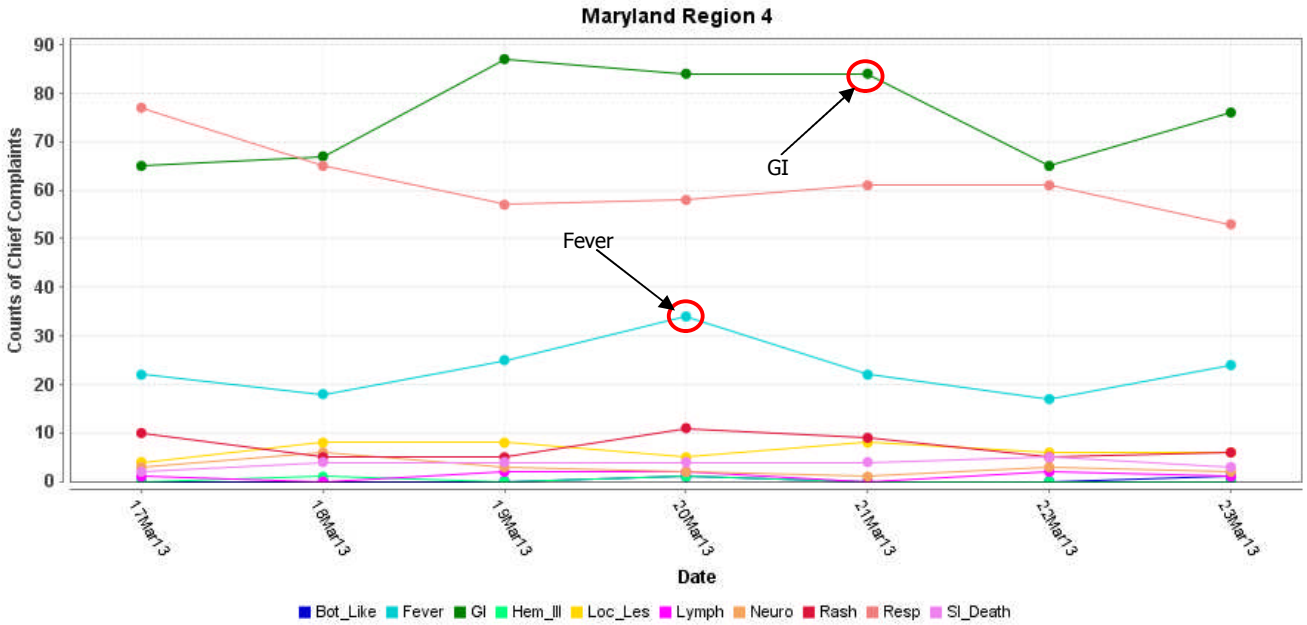
MARYLAND ESSENCE:



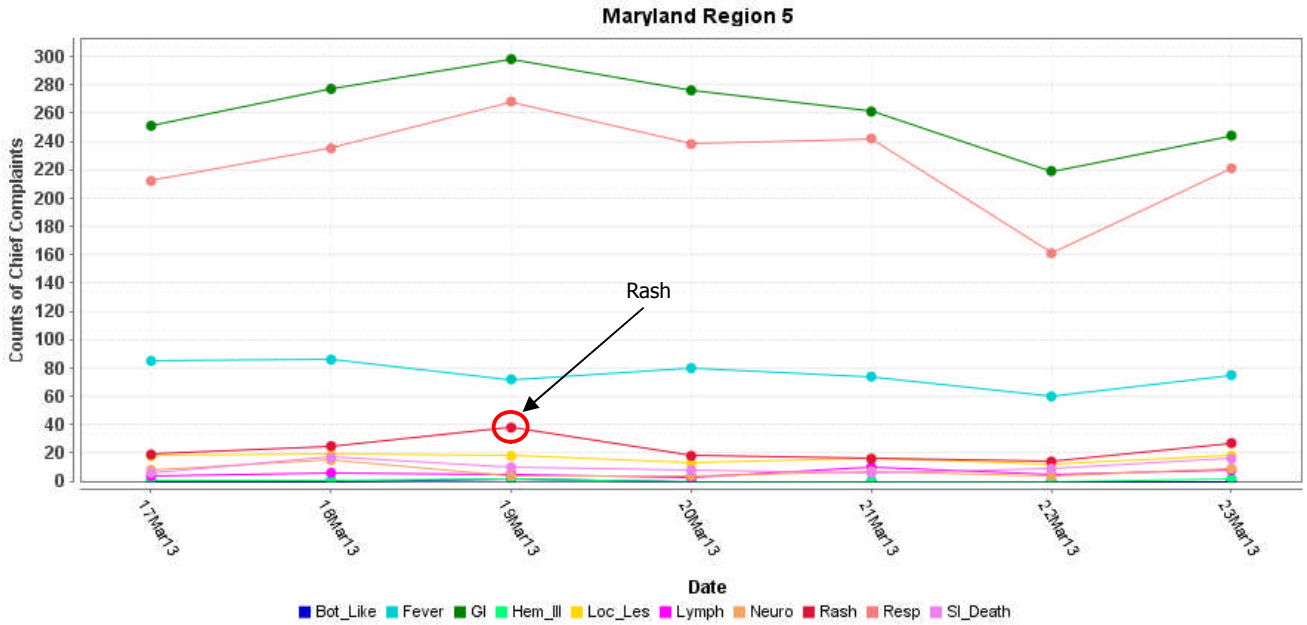
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



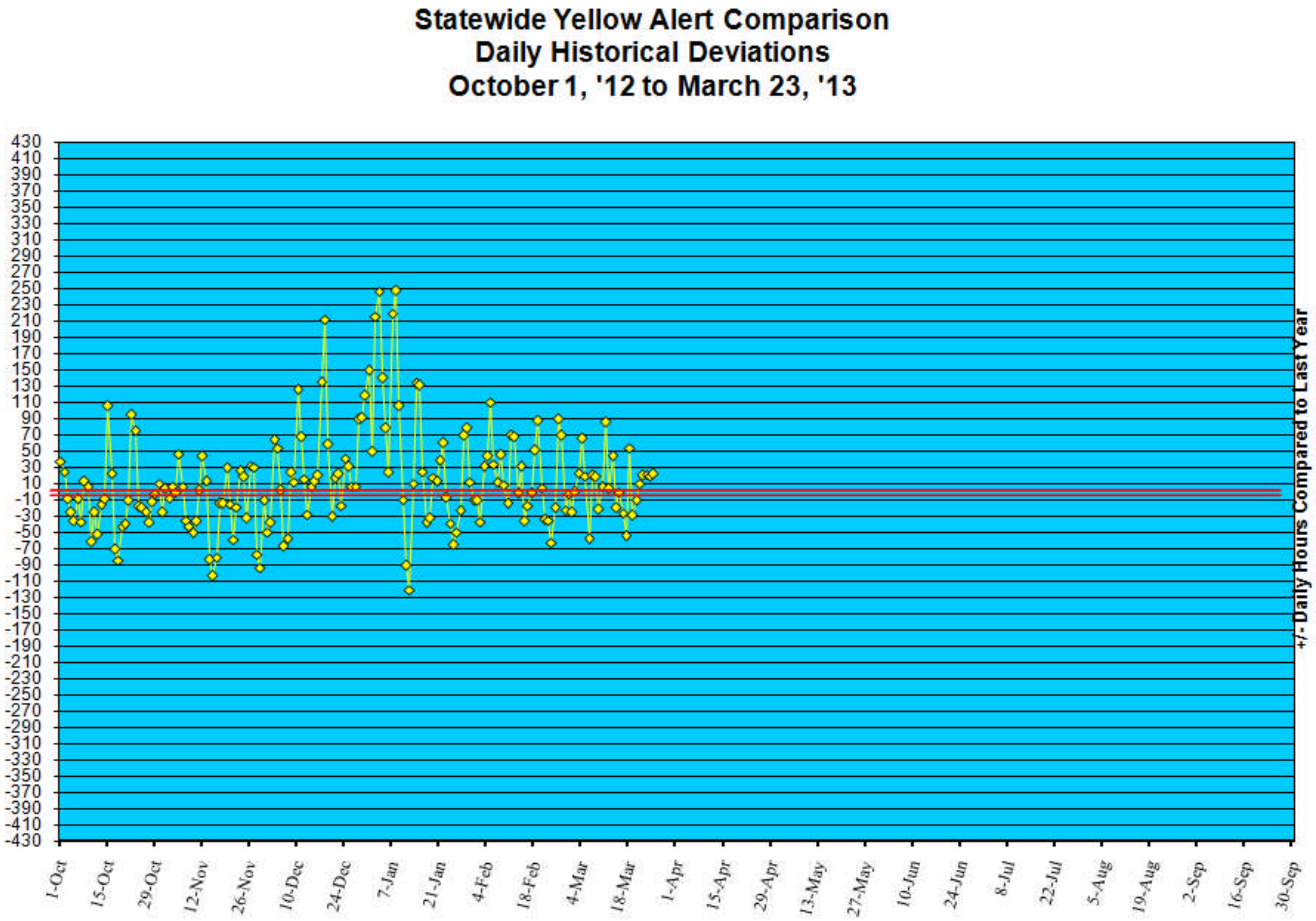
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in January 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (March 17 – March 23, 2013):	6	0
Prior week (March 10 – March 16, 2013):	8	0
Week#12, 2012 (March 19 – March 25, 2012):	6	0

9 outbreaks were reported to DHMH during MMWR Week 12 (March 17-23, 2013)

8 Gastroenteritis Outbreaks
5 outbreaks of GASTROENTERITIS in Nursing Homes
3 outbreaks of GASTROENTERITIS in Assisted Living Facilities

1 Foodborne Outbreak
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Restaurant

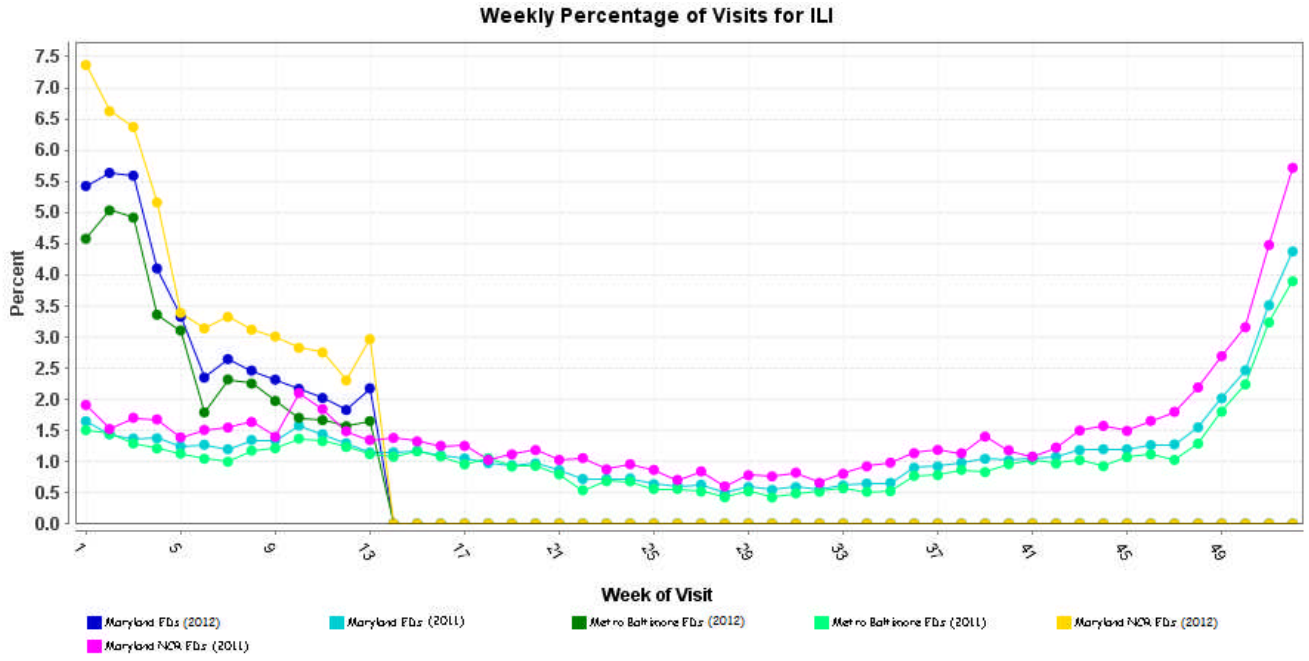
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 12 was: Sporadic Activity with Minimal Intensity.

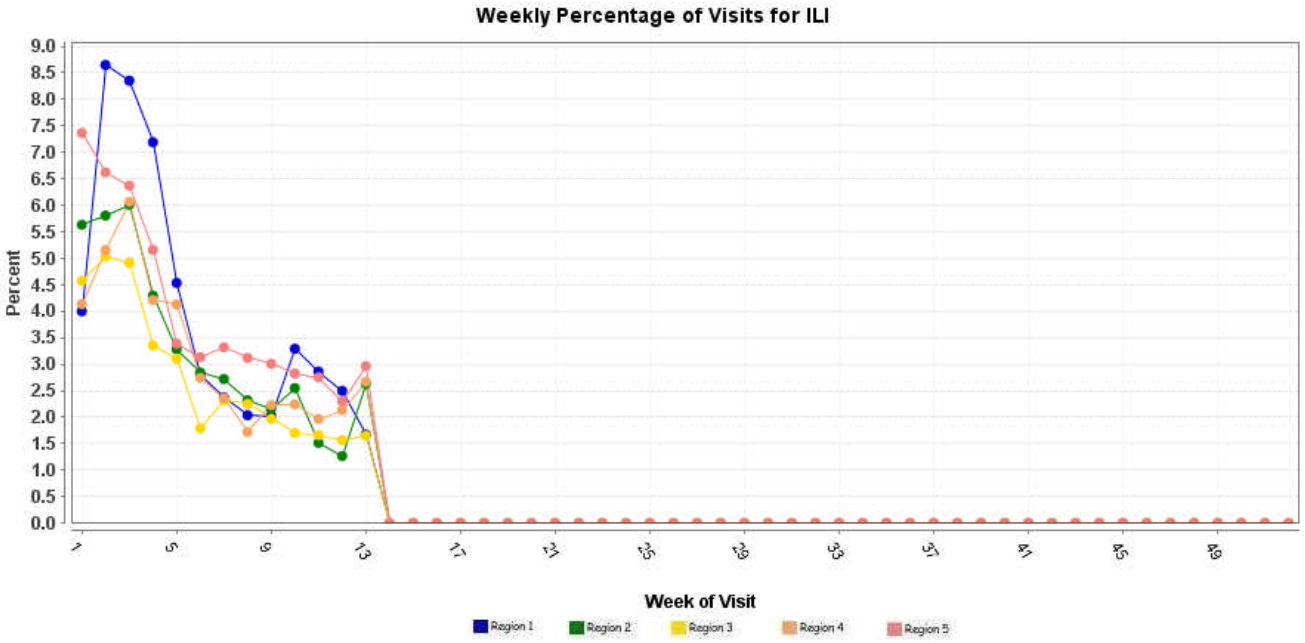
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



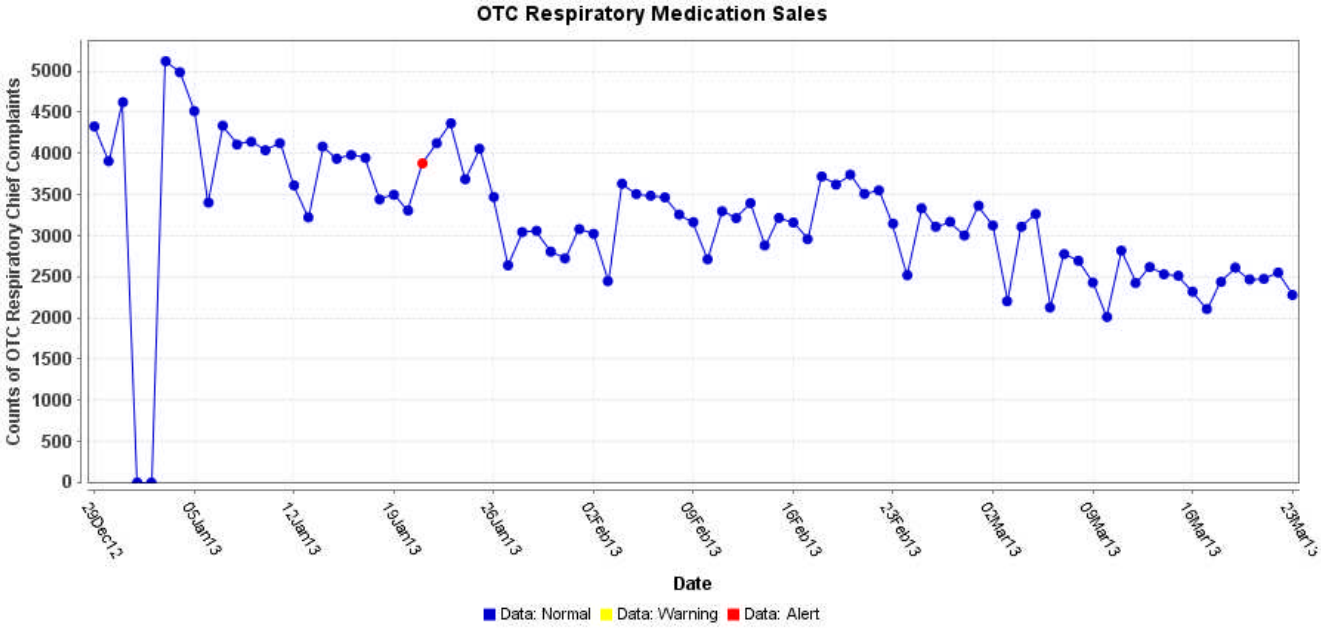
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic. As of March 12, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 622, of which 371 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 60%.

NATIONAL DISEASE REPORTS*

BOTULISM (USA): 21 March 2013, GL Food Wholesale, Golden Dharma International Corp., Waylong Marketing, and Mandalay Trading Corporation are recalling Tausi Brand Salted Black Beans because they may be contaminated with *Clostridium botulinum* or other spoilage organisms. The recalls were announced in the weekly FDA enforcement report. There are 3 separate recalls because the product codes and "best by" dates are different and because the distribution of the product is different for each firm. The beans are in a 180 gram (6.34 ounce) package, 100 cans to the carton. The product is in a 2-piece can with a single seam. The can is wrapped with a label containing red, yellow, and black text. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

CRYPTOSPORIDIOSIS (UNITED KINGDOM): 20 March 2013, "Ready-to-eat" salads from 2 major supermarket chains were behind a stomach infection which poisoned 300 shoppers, the Health Protection Agency has claimed. Cryptosporidia have been traced back to pre-cut bagged salad products which are likely to have been labeled as "ready-to-eat," the HPA said. The salads are believed to have been bought from Morrisons and Asda, although an HPA spokeswoman pointed out that most supermarket chains in the UK have the same suppliers, so any one of them could have been affected. A sample of 25 percent of those who became unwell found 46 percent recalled eating mixed-leaf bagged salad from Morrisons, while 11 percent ate spinach from the Asda chain, the HPA reported. The recall rate is "extremely high," as people often cannot remember what they bought, and the figures provide a "statistically significant association," the agency say. Experts believe that the cryptosporidium infection may have come from the spinach, which would have been in both bags. But Morrisons denied that claim, saying the HPA seemed to want to make an "eye catching announcement" before they are disbanded in 2 weeks. The infection is caused by a parasite [*Cryptosporidium*] in the intestine, which causes an acute, short term infection, the most common symptom of which is diarrhea. The pre-packed salads have come under criticism before, with scientists claiming that they would lead to an increase in food poisoning. After the cryptosporidium outbreak in England and Scotland in May 2012, the HPA launched an investigation. The outbreak was short lived, with most experiencing only moderate symptoms, and the numbers of cases returned to expected seasonal levels within a month of the 1st cases being reported. When they interviewed the people who became unwell about their food history, the HPA discovered the link between the illness and the salads sold at the 2 supermarkets. This is not the 1st time pre-packaged vegetables have been linked to illness. A salmonella outbreak in the UK in 2007 was traced back to imported basil, while an *E. coli* outbreak in America in 2006 was linked back to pre-packed baby spinach. A link to spinach from retailers other than Morrisons and Asda was also suggested but was found to be inconclusive. A spokesperson said: "Together, these findings suggest that one or more types of salad vegetables could have been contaminated." The HPA confirmed that they could not identify contaminated products in any particular chain of supermarkets because of the time lapse, but interviewing a sample of those who fell ill was a investigation method accepted by health organizations across the world. The Food Standards Agency also gathered information on the production and distribution of salad vegetables to try to identify the likely source of the outbreak. But despite investigating the food chain, including the practice and procedures throughout each stage of growing, processing, packing and distribution, they have not managed to identify a source of contamination. Bagged salad on sale in supermarkets is often sourced from the same suppliers for most leaf types, often with common production lines packing product for several retailers at the same time. This was the situation in this case. Dr Stephen Morton, regional director of the HPA's Yorkshire and the Humber region and head of the multi-agency Outbreak Control Team, said: "This outbreak was fortunately short lived, but it was important to see if we could find the source. Our findings suggest that eating mixed leaf bagged salad was the most likely cause of illness. It is, however, often difficult to identify the source of short lived outbreaks of this type, as by the time that the outbreak can be investigated, the affected food and much of the microbiological evidence may no longer be available." "As this was an isolated and short lived outbreak, there is no specific action for the public to take, but we hope the investigations between the FSA and the food industry will help to prevent further outbreaks of this type from happening again." The FSA added: "This would appear to have been an isolated, short-lived outbreak, and it does not appear that there are any on-going problems." They said that consumers should continue to have "confidence" in ready to eat products. Dr Alison Gleadle, director of food safety at the FSA, reminded people to keep their kitchens clean and wash non-ready-to-eat vegetables. Morrisons say that there is no conclusive evidence for a link between their salad and the outbreak. A spokesperson said: "Morrisons is not the source of this outbreak. We have received no complaints of illness, and no Morrisons products have tested positive for cryptosporidia. The HPA's claim is based solely on statistics, not testing. The very same statistics also implicated products from other retailers that the HPA recognise as "implausible." "The HPA appears to be concerned with making an eye catching announcement before being disbanded in 2 weeks time." There are a number of potential sources for the cryptosporidium parasite, including consumption of contaminated water or food, swimming in contaminated water, or through contact with contaminated food or affected animals. Asda have also denied links to the virus outbreak, claiming that investigation by the HPA is "statistically flawed." A spokesperson added: "Product safety is our top priority, and if we had any serious concerns, we'd act immediately. So far, this has not been necessary." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS (SPAIN): 20 March 2013, The Health & Sanitation Council determined that the source of the *Salmonella* outbreak which affected 34 children from the municipal nursery in Arguineguin (Gran Canaria island) was located in the food served in this center, and it may have become contaminated because of "hygiene deficiencies" when manipulating the food. The Canary Islands Government published today, 22 Mar 2013, the conclusions of analyses performed in this nursery in Mogan Municipality, after 17 children between 1 and 2 years of age were hospitalized last week because of abdominal pain, fever, diarrhea, vomiting, and malaise.

Data collected by the General Direction for Public Health revealed that *Salmonella* were present in the foods served in the nursery and they finally declared that 34 children became sick (including the 17 children who were hospitalized). Also, it was found that 10 workers in the center were *Salmonella* carriers and one of them had a sick leave 2 or 3 weeks before this occurrence because of nausea and diarrheal disease. The Health & Sanitation Council considers that "the outbreak could have been originated because of the presence of asymptomatic *Salmonella* carriers and because of hygiene deficiencies when manipulating the foods served in the aforementioned nursery, and this led to having food that was already contaminated before being served and eaten." The report states that *Salmonella* were found only in one portion of Russian salad (potato salad), but not in other foods analyzed (beef stew, mashed vegetables, and pears). However, the report adds on "everything points out to indicate that more than one dish was contaminated." The 1st case was detected in the evening of 11 Mar 2013, and the last one was detected on 14 Mar 2013. The average incubation time was 23 hours, which is compatible with acute gastroenteritis caused by *Salmonella*. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CAMPYLOBACTERIOSIS (AUSTRALIA): 18 March 2013, Health officials have recommended puppies be banned from aged care facilities after 2 outbreaks of potentially deadly *Campylobacter* gastroenteritis in a Canberra nursing home. But trained adult dogs will still be able to visit aged care homes. According to a paper to be presented at a Communicable Diseases Conference in Canberra on Tue 19 Mar 2013, 15 people were infected during 2 separate gastroenteritis outbreaks in the nursing home between April and June 2012. A healthy 4-month-old puppy was identified as the likely cause of the outbreaks and excluded from the facility. An expert panel was established to investigate the case. "*Campylobacter jejuni* was recovered from both human and canine fecal samples," the study findings said. "A review of published literature showed puppies extensively shed *Campylobacter* species. The [aged care] setting and low infective dose also made transmission likely, despite the varying degrees of contact between the puppy and cases. While infection control practices were generally appropriate, the facility's animal policy did not adequately address potential zoonotic risk." Elderly people infected with *Campylobacter* have an increased risk of hospitalization and death. The panel recommended the puppy be excluded from the aged care home until it was at least a year old and assessed as being suited for an aged care environment. The panel decided puppies should not be considered as aged care companions due to "high rates of *Campylobacter* carriage and shedding; their social immaturity; susceptibility of elderly residents to infection; and poor outcomes". In 2012, health authorities were officially notified of 477 campylobacteriosis cases in the ACT [Australian Capital Territory] and 15 645 cases nationally. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable